

Date: Friday, 8/31/2007 11:53:27 AM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : DOUBLER
Job Number : 34373	
Estimate Number : 11464	
P.O. Number : <i>N/A</i>	Part Number : D314089
This Issue : 8/31/2007 S.O. No. : <i>N/A</i>	Drawing Number : D3140 REV F
Prsht Rev. : NC	Project Number : N/A
First Issue : <i>N/A</i> Type : SMALL /MED FAB	Drawing Revision : F
Previous Run : 27376	Material : <i>N/A</i>
Written By : <i>[Signature]</i>	Due Date : 9/4/2007 Qty: 4 Um: Each
Checked & Approved By : <i>[Signature]</i> 07.08.31	
Comment : Est. A 02.04.30 New Issue NG	
Est. Rev B New dwg rev. ecn781 06.04.18 EC	
Est. rev.C added scuffing NCR 061 EC	
Est Rev:D As per ECN #829 06-11-20 JLM	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M2024T3S032	2024-T3 .032 sheet
-----	-------------	--------------------



Comment: Qty.: 1.7430 sf(s)/Unit Total : 6.9720 sf(s)

2024-T3 .032 sheet

Matl: 2024-T3 (QQ-A-250/4) .032" thick

(M2024T3S.032)

Batch *M101422 x2*
*M102942 x2**SAN 07/09/04*

2.0	WATER JET	FLOW WATER JET
-----	-----------	----------------



Comment: FLOW WATER JET

1-Cut as per Dwg D3140

Dwg Rev: *F*Prog Rev: *F*

2-Deburr if necessary

*SAN 07/09/04**4*

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

*SAN 07/09/04**4*

4.0	QC8	SECOND CHECK
-----	-----	--------------



Comment: SECOND CHECK

*Er 09/09/04**(44)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: PD Date: 07/09/25
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 8/31/2007 11:53:27 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DOUBLER

Job Number: 34373

Part Number: D314089

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Scuff surfaces with 80grit sandpaper per QSI 006

2-Deburr.

No sharp edges

GAN 07-09-22

4

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

En 07/09/24 (14) *confer*

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

BR

07-09-24

④

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

ES 07/09/24 (4)

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: ST 184

ES 07/09/24 (4)

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

07/09/25

Job Completion



W 07-09-25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN #	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED JH	APPROVED #	DRAWING NO. D3140	REV. F SHEET 1 OF 7
DATE 06.10.06		TITLE DOOR	SCALE NTS
A	02.04.18	NEW ISSUE	
B	03.01.23	REMOVE -65/-81/-83; ADD -301/-303	
C	04.11.08	CHANGE DELASTEK SPEC. TEC-77; ADD PART MARKING; ADD NOTES 11, 12, 13; CHANGE ANGLE -95/-97/-98 TO 106°	
D	05.11.23	ADD -103/-104/-105/-106; REMOVE -67	
E	06.06.09	1.75 WAS 1.88, 4.75 WAS 4.13 ON -08/-07, 1.00 WAS 1.20 ON -09/-10	
F	06.10.06	ADD NOTE 14; CORRECT PART TITLE, NOW D3140-09/-92/-104 SHOWN D3140-10/-91/-103 OPPOSITE	

RELEASED

06.11.13

QTY -05	QTY -06	QTY -07	QTY -08	QTY -09	QTY -10	PART NUMBER	DESCRIPTION
X						D3140-05	DOOR
	X					D3140-06	DOOR
		X				D3140-07	DOOR
			X			D3140-08	DOOR
		1		X		D3140-09	DOUBLER ASSEMBLY
			1		X	D3140-10	DOUBLER ASSEMBLY
3	3					D3140-57	PAD
1	1					D3140-59	PAD
2	2					D3140-61	PAD
2	2					D3140-63	PAD
		1	1			D3140-69	PAD
		1	1			D3140-71	PAD
		1	1			D3140-73	PAD
		1	1			D3140-75	PAD
		1	1			D3140-77	PAD
		1	1			D3140-79	PAD
				1	1	D3140-85	ANGLE
1	1					D3140-87	DOUBLER
				1	1	D3140-89	DOUBLER
		1				D3140-91	DOUBLER
			1			D3140-92	DOUBLER
3	3					D3140-95	DOUBLER
1						D3140-97	DOUBLER
	1					D3140-98	DOUBLER
		1	1			D3140-99	DOUBLER
		2	2			D3140-101	DOUBLER
		1				D3140-103	DOUBLER
			1			D3140-104	DOUBLER
		1				D3140-105	DOUBLER
			1			D3140-106	DOUBLER
1	1					D3140-241	DOUBLER
1		1				D3140-301	DOUBLER
	1		1			D3140-303	DOUBLER
				5	5	MS20426AD3-4	RIVET

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CHECKED Jh	APPROVED H	DRAWING NO. D3140	REV. F SHEET 2 OF 7
DATE 06.10.06		TITLE DOOR	SCALE NTS

1

COMPOSITE LAYUP & BONDING I.A.W. DELASTEK PROCESS SPEC. TEC-77
MATERIAL STORAGE & HANDLING TO BE I.A.W. DART QSI 006
MAIN LAYUP USES FIBERCOTE E-761/7781 EPOXY FIBERGLASS.
FILL WITH EPOCAST 87269 OR MAGNOBOND 77 A & B AND MA560 FOAM/ NB-51/30 FOAM

2

FINISH: DUPONT HIGHBUILD GREY PRIMER 1144-S

3

MAKE PARTS IN ACCORDANCE WITH THE FOLLOWING TOOLS/MOLDS:

PART	TOOL
D3140-05	B30-23000-01T
D3140-06	B30-23000-02T
D3140-07	B30-23000-03T
D3140-08	B30-23000-04T
D3140-57	B30-23000-57T
D3140-61	B30-23000-61T
D3140-63	B30-23000-63T
D3140-69	B30-23000-69T
D3140-71	B30-23000-71T
D3140-73	B30-23000-73T
D3140-75	B30-23000-75T
D3140-77	B30-23000-77T
D3140-79	B30-23000-79T
D3140-89	D3140-89T1
D3140-301	D3140-301T1
D3140-303	D3140-303T1

RELEASED
06.11.13 H

4

MATERIAL: 2024-T3 (QQ-A-250/4) 0.032 THICK (M2024T3S.032)
FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

5

MATERIAL: 2024-T3 (QQ-A-250/4) 0.020 THICK (M2024T3S.020)
FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

6

MATERIAL: 5052-H32/H34 (QQ-A-250/8) 0.040 THICK (M5052H32S.040)
FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

7

MATERIAL: POLIMEX TR75 1" THICK 4.5 LB KLEGECELL

8

ALL DIMENSIONS IN INCHES

9

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

10

MATERIAL: 6061-T6 (QQ-A-250/11) 0.063 THICK (M6061-T6S.063)
FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

11

DOUBLER TO SIT ON TOP OF FOAM AT THIS LOCATION

12

DOUBLER TO BE RECESSED FLUSH INTO FOAM AT THIS LOCATION

13

RUBBER STAMP WITH DART P/N D3140-05/-06/-07/-08 USING MIL-STD-130

14

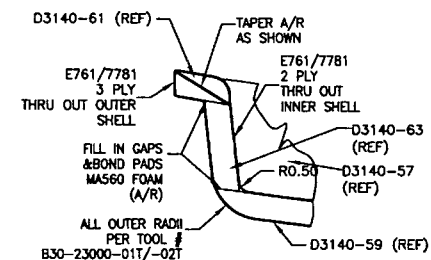
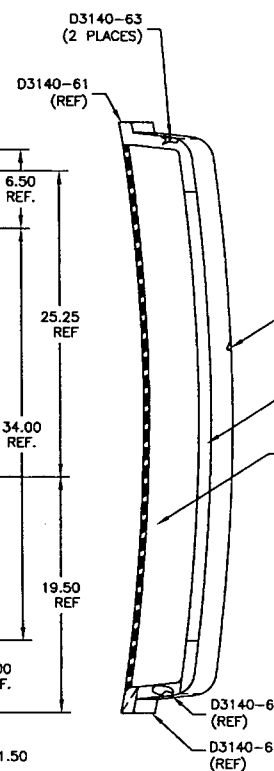
PARTS MUST BE SCUFFED WITH 80 GRIT SANDPAPER PRIOR TO ACID ETCH AND
ALODINE PER DART QSI 005 4.1

F

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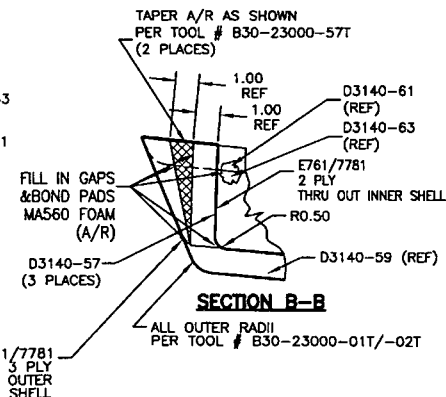


D3140-59

D3140-301
(USE D3140-303 ON -06)

D3140-57 (REF)

06.11.13



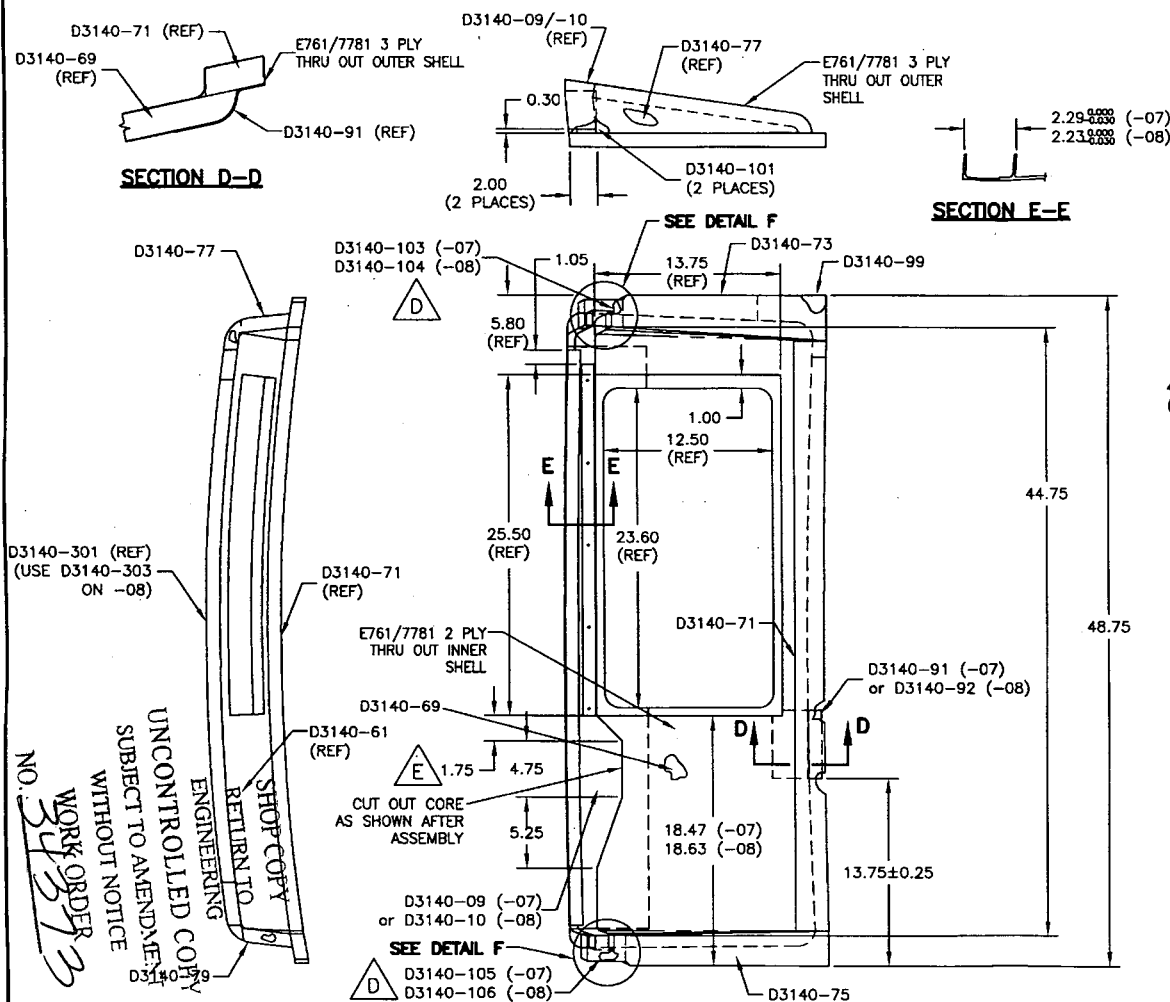
SECTION B-E



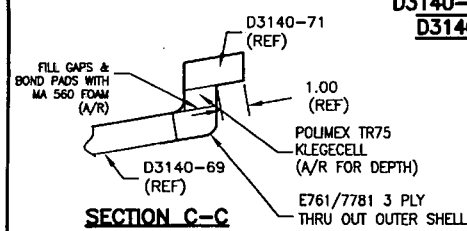
Three triangles are shown, labeled 1, 2, and 3 from left to right.

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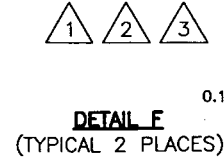


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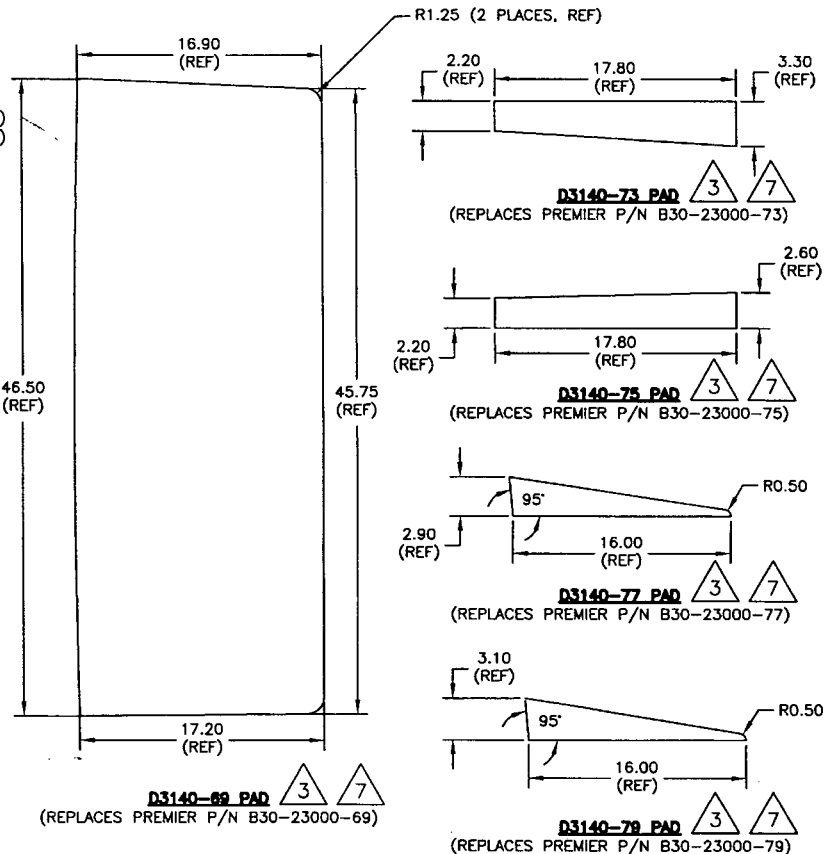


SECTION C-C

D3140-07 DOOR (SHOWN, REPLACES PREMIER P/N B30-23000-07)
D3140-08 (OPPOSITE, REPLACES PREMIER P/N B30-23000-08)
 (WINDOW TO BE LOCATED BY TOOL B30-23000-03T/-04T)



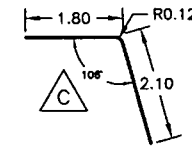
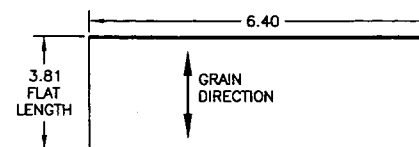
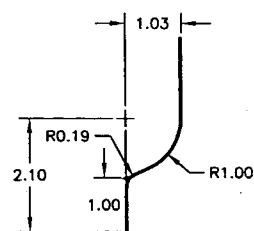
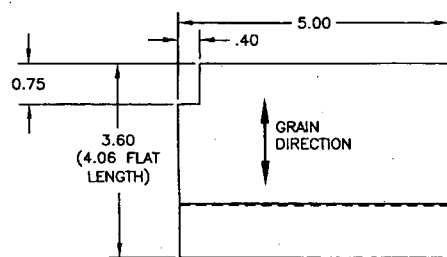
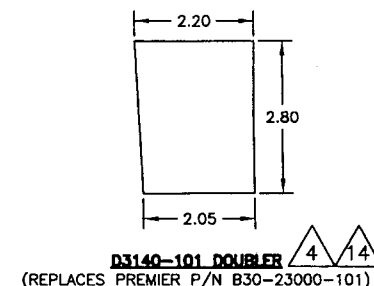
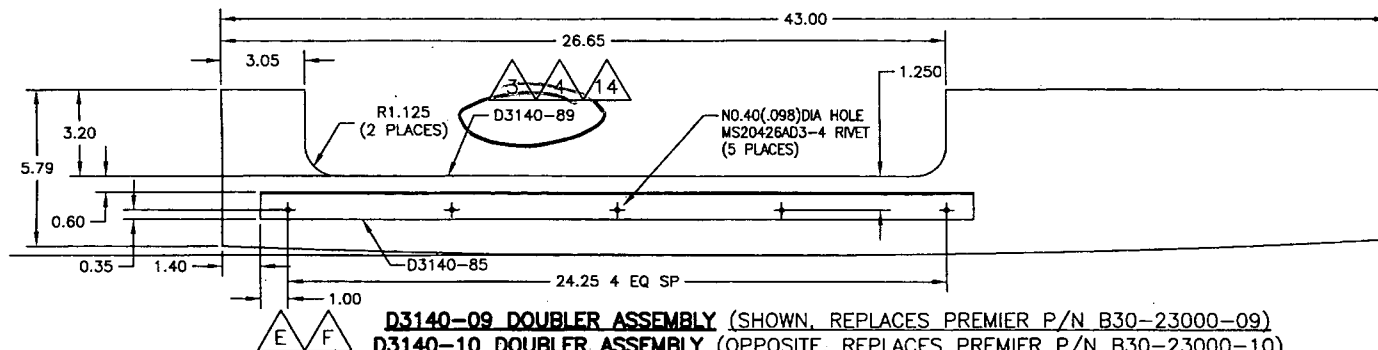
SECTION E-E



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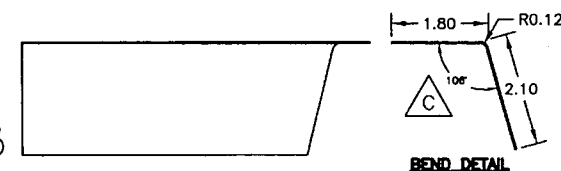
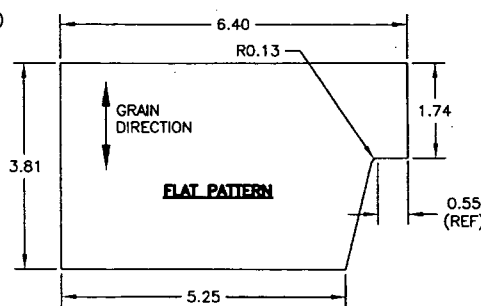
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DATE 06.10.06	TITLE DOOR	SCALE NTS	



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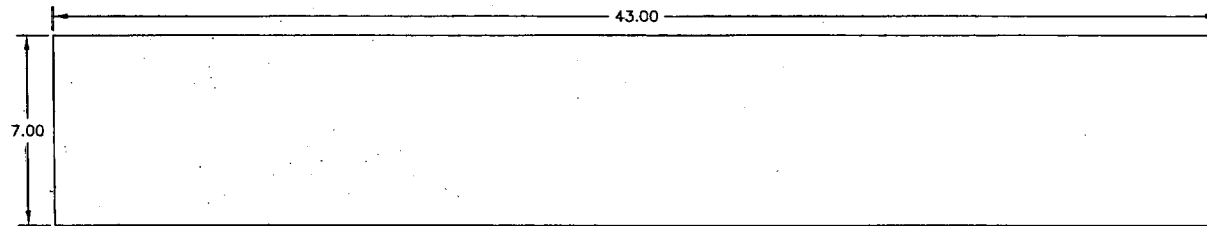


D3140-97 DOUBLER (4 14)
 (SHOWN, REPLACES PREMIER P/N B30-23000-97)
D3140-98 DOUBLER
 (OPPOSITE, REPLACES PREMIER P/N B30-23000-98)

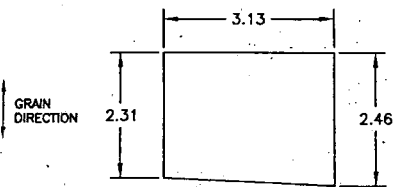
D3140-99 DOUBLER (4 14)
 (REPLACES PREMIER P/N B30-23000-99)

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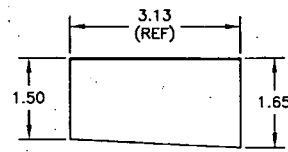
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		DATE	06.10.06	TITLE		D3140	SHEET 5 OF 7
						DOOR	SCALE NTS



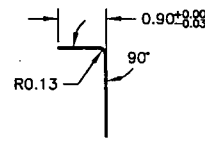
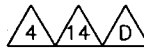
D3140-87 DOUBLER $\triangle 4 \triangle 14$
(REPLACES PREMIER P/N B30-23000-87)



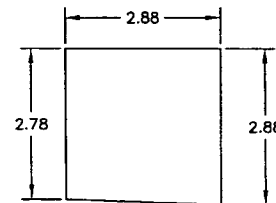
D3140-105F FLAT PATTERN
(USED TO MAKE D3140-105/-106 BRACKETS)



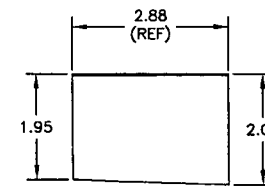
D3140-105 DOUBLER
D3140-106 OPPOSITE



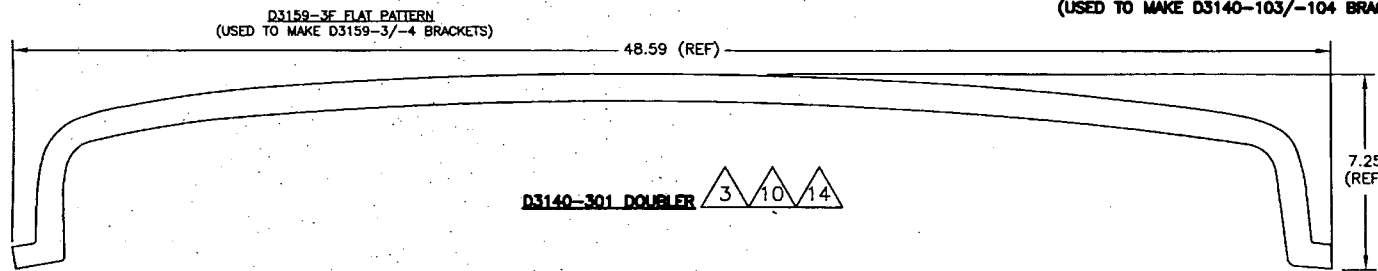
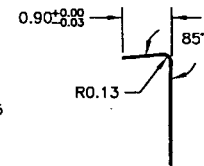
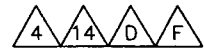
GRAIN DIRECTION



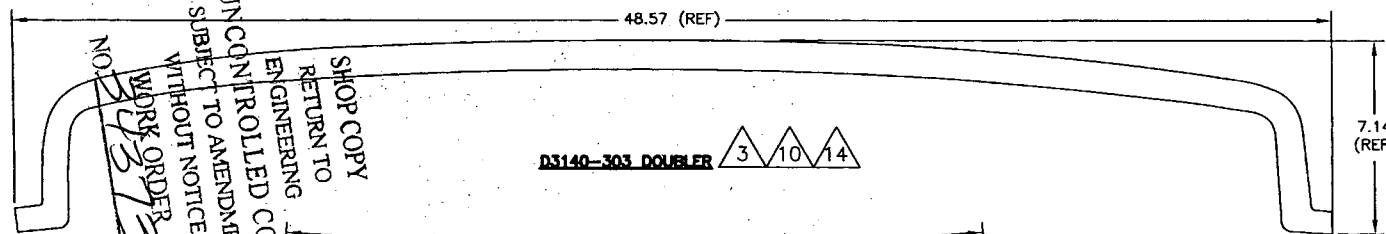
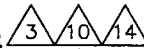
D3140-103F FLAT PATTERN
(USED TO MAKE D3140-103/-104 BRACKETS)



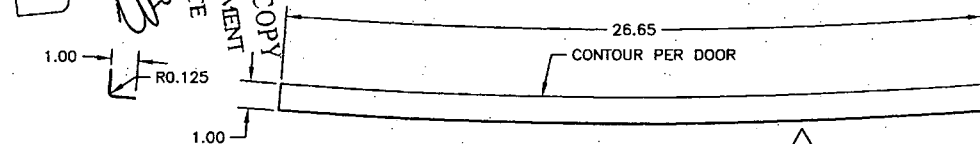
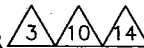
D3140-104 DOUBLER
D3140-103 OPPOSITE



D3140-301 DOUBLER



D3140-303 DOUBLER



D3140-85 ANGLE $\triangle 6$
FLAT PATTERN: 26.65" x 1.90"
(REPLACES PREMIER P/N B30-23000-85)

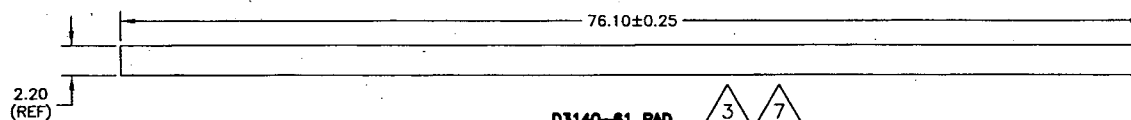
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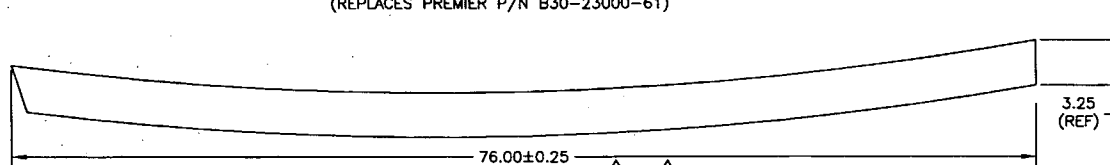
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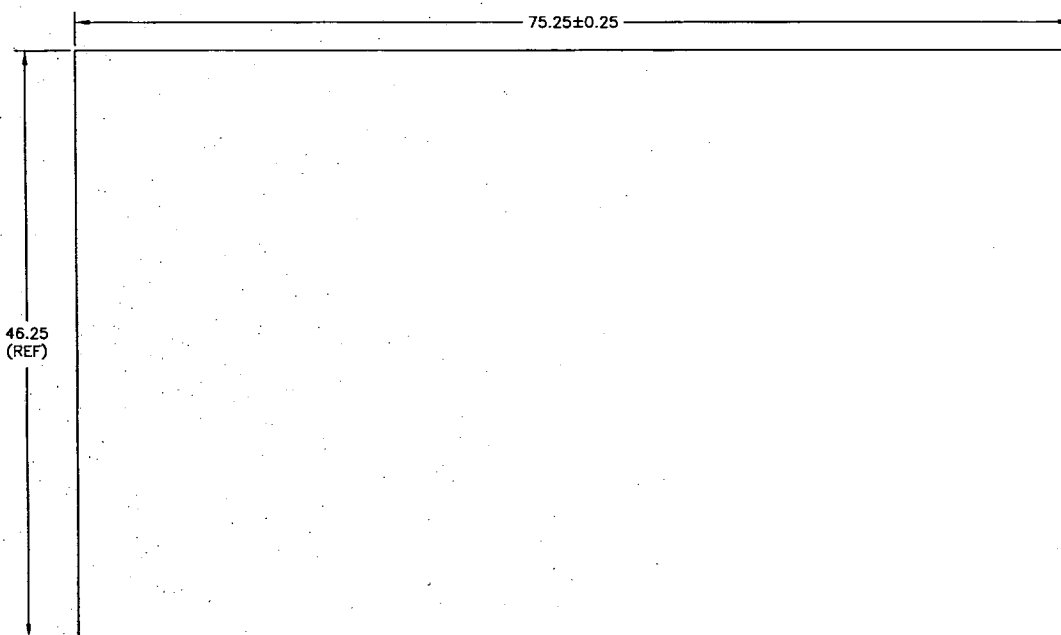
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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3140	REV. F SHEET 6 OF 7
DATE 06.10.06	TITLE DOOR	SCALE NTS	



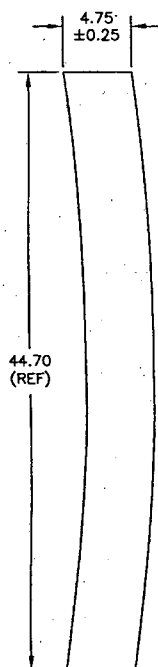
D3140-61 PAD
(REPLACES PREMIER P/N B30-23000-61)



D3140-63 PAD
(REPLACES PREMIER P/N B30-23000-63)



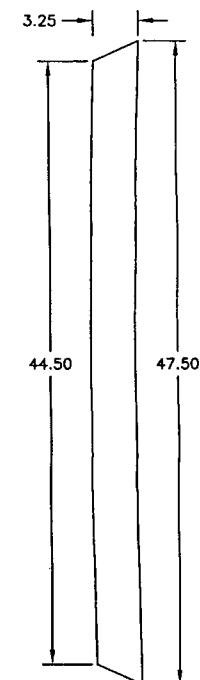
D3140-59 PAD
(REPLACES PREMIER P/N B30-23000-59)



D3140-57 PAD
(REPLACES PREMIER P/N B30-23000-57)

3 7

NO. 34373
WORK ORDER
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D3140-241 DOUBLER
(REPLACES PREMIER P/N B30-23000-241)

5 14

RELEASED

06.11.13

R1.00
(2 PLACES, REF)

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DESIGN	4	DRAWN BY	CB	DART	DART AEROSPACE LTD. HAMPSHIRE, ENGLAND, CANADA
CHECKED	dh	APPROVED		DRAWING NO.	D3140
DATE	06.10.06	TITLE	DOOR	REV. F	SHEET 7 OF 7
				SCALE	NTS

DART AEROSPACE LTD	Work Order:	34373
Description: <i>Seabler</i>	Part Number:	D3140 089
Inspection Dwg: D3140 Rev: F		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

<input checked="" type="checkbox"/> First Article	<input type="checkbox"/> Prototype
<p>1. Introduction</p> <p>2. Materials and Methods</p> <p>3. Results</p> <p>4. Discussion</p> <p>5. Conclusion</p>	<p>1. Introduction</p> <p>2. Materials and Methods</p> <p>3. Results</p> <p>4. Discussion</p> <p>5. Conclusion</p>

[illegible]

Measured by: <i>SAD</i>	Audited by: <i>En</i>	Prototype Approval: <i>N/A</i>
Date: <i>07/09/04</i>	Date: <i>07/09/04</i>	Date: <i>N/A</i>

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	